

Water Compliance Inspection Report

Section A: National Data System Coding (i.e., PCS)

Transaction Code		NPDES										yr/mo/day					Inspection Type		Inspector		Fac Type												
1	N				I	D	U	0	0	0	3	5	1		1	3	0	4	1	7		=			R			3					
Remarks																																	
21																													66				
Inspection Work Days				Facility Self-Monitoring Evaluation Rating										BI		QA		Reserved															
67		5		69												71	N		72	N		73			74			75					80

Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) Sage Dairy 5888 Sandy Avenue Emmett, Idaho 83617	Entry Time/Date 8:25 am; 04/17/13	Permit Effective Date Unpermitted
	Exit Time/Date 1:53 pm; 04/17/13	Permit Expiration Date Unpermitted
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Terry Jones, Owner, (b) (6) Curtis Yett, Operator/Lessee; (b) (6)	Other Facility Data (e.g., SIC NA/ICS, and other descriptive information) Unpermitted facility SIC code: 0241 NAICS code: 112120	
Name, Address of Responsible Official/Title/Phone and Fax Number Terry Jones, Owner 5888 Sandy Avenue Emmett, Idaho 83617	Contacted <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	


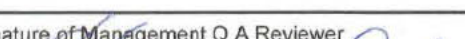
Section C: Areas Evaluated During Inspection (Check only those areas evaluated)

<input type="checkbox"/> Permit	<input type="checkbox"/> Self-Monitoring Program	<input type="checkbox"/> Pretreatment	<input type="checkbox"/> MS4
<input type="checkbox"/> Records/Reports	<input type="checkbox"/> Compliance Schedules	<input type="checkbox"/> Pollution Prevention	
<input checked="" type="checkbox"/> Facility Site Review	<input type="checkbox"/> Laboratory	<input checked="" type="checkbox"/> Storm Water	
<input checked="" type="checkbox"/> Effluent/Receiving Waters	<input checked="" type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> Combined Sewer Overflow	
<input type="checkbox"/> Flow Measurement	<input type="checkbox"/> Sludge Handling/Disposal	<input type="checkbox"/> Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes	SEV Description
● ● ● ● ● ● ● ● ● ●	
● ● ● ● ● ● ● ● ● ●	
● ● ● ● ● ● ● ● ● ●	
● ● ● ● ● ● ● ● ● ●	

Name(s) and Signature(s) of Inspector(s) Patrick Stoll 	Agency/Office/Phone and Fax Numbers EPA/R10/OCE/IEMU/IOO; 208-378-5772	Date 04/18/2013
Signature of Management Q A Reviewer 	Agency/Office/Phone and Fax Numbers EPA/R10/OCE/IEMU 3-0955	Date 5/3/13

**National Pollutant Discharge Elimination System (NPDES)
Concentrated Animal Feeding Operation (CAFO) Inspection
Non-Sampling**

NPDES Tracking No: IDU000351 (unpermitted)

**Sage Dairy
5888 Sandy Avenue
Emmett, Idaho 83617**

**Inspection date: April 17, 2013
Report completion date: May 3, 2013**

Prepared by:

**Patrick Stoll
U.S. Environmental Protection Agency, Region 10
Office of Compliance and Enforcement
Inspection and Enforcement Management Unit
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I. Facility Information

Facility Name: Sage Dairy

NPDES Tracking No.: IDU000351
(an unpermitted facility)

Facility Contact(s): Terry Jones, Owner
(b) (6)
Curtis Yett, Lessee/Operator
(b) (6)

Facility Type: Dairy Farm, SIC code: 0241; NAICS code: 112120

Facility Location: 5888 Sandy Avenue
Emmett, Idaho 83617

Mailing Address: 5888 Sandy Avenue
Emmett, Idaho 83617

Latitude/Longitude: 43.952322
- 116. 651850

II. Inspection Information

Inspection Date(s): April 17, 2013

Inspector(s): Patrick Stoll, Environmental Scientist (lead)
EPA Region 10/OCE/IEMU/IOO
(208) 378-5772
Maria Lopez, Environmental Scientist
EPA Region 10/IOO
(208) 378-5616
Ralph Fisher, Senior Environmental Employee (assisting
and observing)
EPA Region 10/IOO
(208) 378-5716

Entry Time: 8:25 am MDT

Exit Time: 1:53 pm MDT

Weather Conditions: Clear, windy, 40s to mid 50s (F).

Receiving Waters: Sandy Hollow Drainage; discharges to Payette, River.

Purpose: Evaluate potential for the facility to discharge pollutants to Waters of the United States (WOUS).

III. Facility Overview

Sage Dairy has been owned by Terry Jones for well over twenty years. The facility is located in a narrow draw approximately nine miles northeast (NE) of Emmett, Idaho (approximately twelve road miles NE of Emmett). The facility is approximately 550 acres in size. Of this, the dairy production area encompasses a little over 30 acres; the bulk of the remaining land is farmed (corn, triticale, alfalfa). Most of the farmed land is surface irrigated. Since January 2012, the dairy portion of the facility has been leased to Curtis Yett. At the time of this inspection, approximately 1600 cattle were confined on-site (720 milkers, 700 heifers, and 180 calves). The liquid waste storage lagoons have been designed for a maximum herd size of 4000.

IV. Background Information

Prior to this inspection, the Idaho Operations Office (IOO) of the U.S. Environmental Protection Agency (EPA) had received complaints about alleged discharges to the waters of the United States (WOUS) from this facility. At least one of these complaints was previously investigated by Nick Peak, the regional CAFO coordinator based in EPA's IOO. No discharges or obvious areas of concern associated with the dairy operations were noted at that time. During the course of this inspection, it became clear that there is a very contentious and ongoing dispute between Mr. Jones and (b) (6)

[REDACTED]

V. Site Entry and Scope of the Inspection

Maria Lopez, Ralph Fisher, and I arrived at Sage Dairy at 8:25 the morning of April 17, 2013 to conduct an unannounced inspection. We initially met with John Morton, the dairy manager. I introduced myself, Maria, and Ralph and explained the purpose of our visit. Maria and I also presented our inspection credentials. Mr. Morton indicated that Curtis Yett, the dairy operator/lessee, was expected to arrive at the facility by 9:00am. Mr. Morton led us to a small office trailer where we awaited Mr. Yett's arrival.

When Mr. Yett arrived on schedule, I once again introduced myself, Maria, and Ralph and explained the purpose of our visit. As before, Maria and I presented our inspection credentials. Mr. Yett explained that he was only responsible for the dairy operations which he began leasing from Terry Jones in January 2012 (the lease is scheduled to expire in 2020). Mr. Yett agreed to assist us with the inspection and I began to work my way through the inspection checklist. When it became clear that Mr. Yett did not have the detailed information needed to answer all my questions, he told me he would need to see if James Jones was available to assist (James, (b) (6) [REDACTED]; James is responsible for the farming operations at the facility). Mr. Yett briefly left but soon returned accompanied by James Jones and (b) (6) [REDACTED] Edith.

As before, introductions were made and inspection credentials were presented. James indicated that he did not recall ever seeing EPA at the dairy before and had numerous questions about why we had selected this particular facility for an inspection. I explained that while we had received some complaints about the facility in the past, the current inspection was part of a routine series of inspections we were conducting in the area. I noted that the proximity to WOUS and the fact that EPA had not previously conducted a routine, in-depth CAFO inspection at Sage Dairy were the primary factors leading to the nomination of the facility as a candidate for an inspection. I acknowledged that the previous complaints were a factor but not the primary reason for the visit.

As I began to ask James questions about the facility, (b) (6) [REDACTED] Edith briefly left the office. She returned a few minutes later and informed me that she had just been in touch with (b) (6) [REDACTED], Terry Jones. Mr. Jones (b) (6) [REDACTED]. Edith Jones indicated that Terry was on his way to the site and wanted the inspection to stop until his arrival.

As the inspection came to a halt, the Sage Dairy folks went about their business while Maria, Ralph, and I were left in the office trailer. Within minutes my cell phone rang. I answered a call from Terry Jones Jr., an attorney in the Boise area (b) (6) [REDACTED]. I ended up speaking with Terry Jr. for 20-25 minutes. (b) (6) [REDACTED]. Terry Jr. was interested in the reason for the inspection. After sharing the same information with him that I had provided to James, Terry Jr. and I had a lengthy conversation about the contentious history of allegations, divisiveness, and litigation that has characterized the relationship between Terry Sr. and (b) (6) [REDACTED] who submitted complaints alleging discharges of pollutants to the WOUS from Sage Dairy. At the end of the call, Terry Jr. indicated that he would call Terry Sr. to suggest that he allow us to continue with the inspection.

A short time later, Terry Sr. arrived at the site. Once again, introduction were made and credentials were presented. Terry Sr. provided a lengthy recap describing the issues with (b) (6) [REDACTED] and the reasons he felt these issues were leading to harassment by the various agencies. As he described the history of regulatory activity at the facility, it appeared that there might be some confusion with respect to the role and the identity of the different agencies that may or may not have been involved with

issues at the site at various times (particularly with respect to ISDA, EPA, and the Idaho Department of Environmental Quality). After sharing his concerns, Terry Sr. agreed to allow the inspection to continue.

After reviewing details about the dairy operations (e.g., herd size, total acreage, Nutrient Management Plan, waste management practices), I told both Terry and James Jones that we would like to review the dairy's waste management operations.

VI. Waste Management

Waste solids (manure and bedding) from the production area at Sage Dairy are applied to crop land. According to Terry Sr., 9% of the solids are applied to the farmland directly adjacent to the dairy proper on a three-year rotational basis (one of third of the land receiving waste once every three years). The most recent land application had been to the western-most third of field #1 (see Figure 1 in Appendix A). The remaining 91% of the waste solids are exported to third-party fields.

Liquid wastes are managed on-site in a system of collection ponds prior to land application via a surface irrigation system (see Photos 1-3, Appendix B). According to Terry Sr., the "closed-loop" liquid waste management system was designed by the Natural Resource Conservation Service (NRCS). Figures 2-4 (Appendix A) illustrate configuration and operation of the counter-clockwise system. Though referred to as a "closed-loop" system, there are inherent design problems in the system that could potentially allow for a discharge to the WOUS.

The "closed-loop" surface irrigation system begins in the lower central portion of the site near the south end of the "secondary separation pond" and the east end of the "irrigation return ditch" (see Figures 2 and 3 in Appendix A). A pumping system (pump, piping, check valves, and butterfly control valves; see Photo 3, Appendix B) installed at the east end of the irrigation return ditch draws water from both the secondary separation pond and the irrigation return ditch. According to Terry Sr., the valve and piping arrangement allows an operator to adjust the system to provide for a 1/9 mix (10% liquid waste/90% water from the irrigation return ditch). The mixture is pumped uphill (toward the east) before making a 90% turn to the north. The irrigation water mixture flows into a gated irrigation pipe at the south east corner of field #5 (see Figure 4). This pipe dead-ends at its northernmost end. Irrigation water flows downhill (toward the west) across the surface of field #5. From the westernmost border of field #5, all remaining irrigation runoff flows toward and is collected in a small "separation pond". From the separation pond, water flows through a pipe (gravity flow) to another gated irrigation pipe bordering the top of field #4 (this flow is parallel to, but distinctly separate from, the adjacent Sandy Hollow Drainage). From this point, the irrigation return water flows downhill (toward the south) across field #4. Berms along the southern end of field #4 direct any remaining irrigation return flow to the south east corner of the field where it passes through a culvert into the eastern end of the irrigation return ditch. A major flaw with this "closed-loop" system is that it depends on the hydraulic head created by water from the Sandy Hollow Drainage flowing into

the west end of the irrigation ditch (see Photos 4-5) to insure that the system is indeed "closed". Absent this hydraulic head, irrigation return water from field #4 could flow back toward the west and enter the WOUS via a perpendicular lateral (a continuation of Sandy Hollow Drainage) that flows south from the irrigation return ditch (located about a third of the way from the ditch's western end) toward the Payette River (see Figure 7 and Photo 5).

When I mentioned my concerns about the potential for a discharge of pollutants from the irrigation return ditch to the WOUS, Terry Sr. assured me that the hydraulic head from Sandy Hollow Drainage was always present during the time when irrigation (and pumping from the secondary separation liquid waste pond) was taking place.

VII. Closing Conference

Upon conclusion of the inspection (which included an extensive site tour provided by Terry Jones Sr. and (b) (6) James), we met back at the trailer for a closing conference. I explained to Terry Sr. that while we did not observe any discharges from the facility during the course of our inspection, I did have some concerns about the potential for a discharge of pollutants, particularly with respect to the "closed-loop" surface irrigation system utilizing liquid waste from dairy operations. Concerning this particular issue, in conjunction with the previous complaints/allegations, I told Terry Sr. that we might want to collect and analyze water quality samples from various location in and around the facility at some point in the future. I explained that we would be interested in sampling the water from the irrigation canal at the point where it first enters Sandy Hollow Drainage (see Photo 8); Sandy Hollow Drainage itself at various locations within the facility; and the location where water leaves the irrigation return ditch and flows into the continuation of Sandy Hollow Drainage on its way to the Payette River (Figure 7). I noted that this last sample might be one of the more important ones but also more problematic since we would need permission from the adjacent landowner to obtain property access. Terry Sr. indicated that this wasn't an issue because the current fenceline was not located on the true property boundary. According to Terry Sr., he owned an additional 30' of property immediately south of the fenceline. He indicated that we were welcome to collect any of the samples we needed as long as we provided him with split samples. I initially told Terry Sr. that I would like to take him up on his offer and collect samples at that time. After giving the matter further thought, I decided to postpone the sampling until a latter time to provide for additional planning and the procurement of sufficient sample containers to provide Terry Sr. with the splits he requested.

VIII. Areas of Concern

Sage Dairy is a large concentrated animal feeding operation (CAFO) as defined at 40 CFR 122.23 (a)(4).

40 CFR 122.23 (e) stipulates that *"The discharge of manure, litter, or process wastewater to waters of the United States from a CAFO as a result of the application*

of that manure, litter, or process wastewater by the CAFO to land areas under its control is a discharge from the CAFO subject to NPDES permit requirements...".

As noted previously in the *Waste Management* section of this report, the "closed-loop" system that utilizes liquid waste from the dairy operations for surface irrigation is not completely closed – the potential for a discharge of pollutants (processed wastewater from the dairy operations) to the WOUS does exist given the system's current design.

There is also a potential for a dry-weather discharge from fields where waste solids from the dairy have been land applied. As noted previously, 91% of the solids generated at the facility are exported for land application onto third-party fields. The remaining solids (9%) are applied to fields at Sage Dairy on a three-year rotational basis (e.g., the 9% going onto one third of the the fields one year, applied to a separate third of the fields the following year, etc). According to both Terry Sr. and James Jones, the solids are plowed into the soil shortly after application. Once surfaced irrigation is applied to the northernmost fields (Fields 1, 2, and 3; Figure 7), There is a potential for the surface irrigation return flow from these fields to transport pollutants to Sandy Hollow Drainage.

Report Completion Date:

5/8/2013

Inspector:

Patrick Stoll, EPA/R10/IOO
Lead Inspector

Appendix A

Figures 1-7 (Google Earth Photos)

Sage Dairy – Figure 1

Facility overview and prominent site features



Sage Dairy – Figure 2

Waste management ponds and
“irrigation return/recovery ditch”

“Weeping Wall”; liquid
waste passes through here
to next pond

Secondary separation
pond

Primary waste
management pond ;
liquids and slurry
initially goes here

“Irrigation return ditch”; receives water from 3 sources:
direct flow from Sandy Hollow Drainage, surface irrigation return from
northern fields, and surface irrigation return from east-side field where liquid waste is applied

Google earth

Sage Dairy – Figure 3

“Irrigation return ditch” details

Runoff from the SW field passes through a conduit (below the road/embankment) and into the east end of the irrigation return ditch

A mixture of liquid waste (9%) from the separation pond and water (91%) from the east end of the irrigation return /“recovery” ditch is pumped from the two sources to gated irrigation pipes that delivers surface irrigation to fields 5 and 4

Google earth

Sage Dairy – Figure 4

Liquid waste/irrigation flow pattern

Separation pond

Gated irrigation pipe

Return flow from this field enters east end of irrigation return ditch here

Google earth

Sage Dairy – Figure 5
Sandy Hollow Drainage Flow Pattern



Sage Dairy – Figure 6

North side irrigation flow pattern

Land application of solids combined with surface irrigation may lead to discharge of pollutants from this field to Sandy Hollow Drainage

Gated surface irrigation pipe utilizing canal water

Gated surface irrigation pipe utilizing water

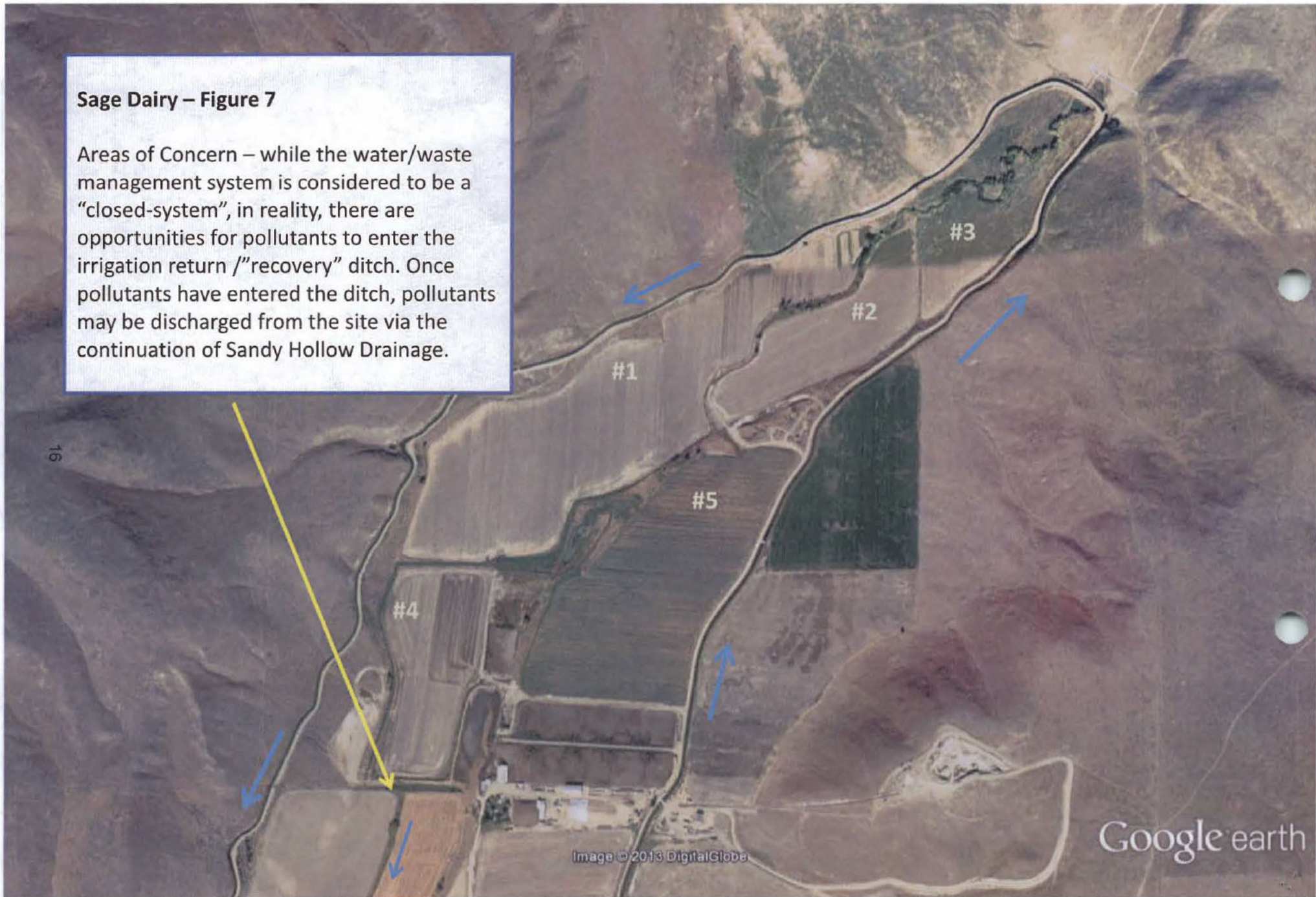
Sandy Hollow Drainage

Google earth

Image © 2013 DigitalGlobe

Sage Dairy – Figure 7

Areas of Concern – while the water/waste management system is considered to be a “closed-system”, in reality, there are opportunities for pollutants to enter the irrigation return / “recovery” ditch. Once pollutants have entered the ditch, pollutants may be discharged from the site via the continuation of Sandy Hollow Drainage.



Appendix B

Photo Log

Sage Dairy, Photo Log

Inspection site
or facility name: Sage Dairy

Location: 5888 Sandy Avenue
Emmett, ID 83617

NPDES ID #: IDU000351

Type of Inspection: CAFO Inspection

Date of Inspection: April 17, 2013

Inspector(s): Patrick Stoll/U.S. EPA/R10/IEMU/IOO - lead
Maria Lopez/U.S. EPA/R10/IOO

Image capture device: Richo Caplio 500SE

Original file type, pixel
dimensions, and file numbers
assigned by camera: JPG; 3264 x 2448 pixels; Image numbers
R0011972 through R0011710

Folder name for resized
images and pixel dimensions
(for use in Photo Log): Inspections > CAFOs2013 > SageDairy

Photo Log Image ID #s: Images numbered: 1-9

Digital images recorded by: Maria Lopez unless otherwise noted


Drainage/flow direction: 

Photo Log prepared by: Maria Lopez

Sage Dairy
5888 Sandy Avenue
Emmett, ID 83617

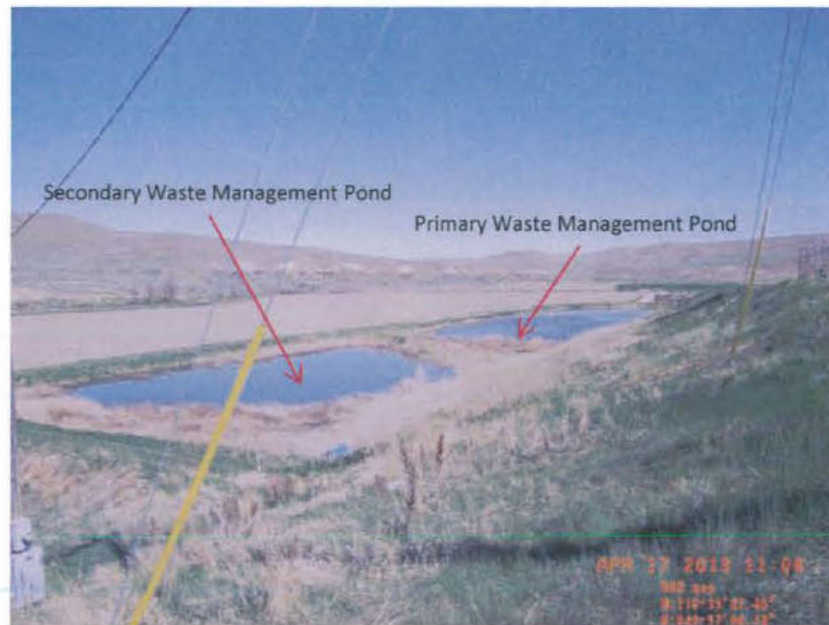


Photo No. 1

Photo shows the waste management ponds at the Sage Dairy (Facility). Liquids and solids from the Facility initially go to the primary waste management pond where solids settle out. The liquids pass through a "weeping wall" into the secondary separation pond (Refer to Figure 2).



Photo No. 2

Photo shows the secondary separation pond and the irrigation return ditch (left side of the photo). The waste management ponds and the irrigation return/recovery ditch are also depicted in Sage Dairy – Figure 2. Nearby fields are irrigated using a mixture of these two water sources. According to the on-site representative, Mr. Terry Jones, Land Owner, 9% of the water used to irrigate the nearby fields is from the liquid in the secondary waste management pond and 91% is from the irrigation return ditch.

Sage Dairy
5888 Sandy Avenue
Emmett, ID 83617



Photo No. 3

Photo shows the pumping system, consisting of a pump, piping, check valves, and a butterfly control valve, which draws water from the irrigation return ditch (91%) and the separation pond (9%) shown in Photo Nos. 1 and 2 above.



Photo No. 4

Photo shows the Sandy Hollow Drainage near/above the location where it flows into the irrigation return ditch.

Sage Dairy
5888 Sandy Avenue
Emmett, ID 83617



Photo No. 5

In the forefront of the photo is the irrigation return ditch. The irrigation return ditch feeds into a perpendicular lateral which is a continuation of the Sandy Hollow Drainage that eventually flows to the Payette River. This is an area of concern because irrigation return water from Field No. 4 could potentially flow into the irrigation return ditch and discharge to this perpendicular lateral (Refer to Figure 7).



Photo No. 6

The 91% irrigation ditch/9% separation pond mixture mentioned in Photo No. 2 above is pumped uphill and flows into this gated irrigation pipe.

Sage Dairy
5888 Sandy Avenue
Emmett, ID 83617



Photo No.7

Photo taken overlooking the irrigation canal (refer to Figure 1). When water in the canal reaches a certain level, overflow passes through concrete conveyance and into the Sandy Hollow Drainage.



Photo No. 8

Photo shows the Sandy Hollow Drainage mentioned in Photo No. 7 above. The Sandy Hollow Drainage flows through the Facility. Irrigation return water from land application to the surrounding fields would flow into the Sandy Hollow Drainage and a portion would flow into the perpendicular lateral shown in Photo No. 5

Sage Dairy
5888 Sandy Avenue
Emmett, ID 83617



Photo No. 9

Photo was taken overlooking Field #1. Surface irrigation flows down and across the field into the Sandy Hollow Drainage. Once in the Drainage, return flows are transported to the irrigation return ditch. From the ditch, water flows on to the south in the continuation of the Drainage (see Figure 6).